

Assessing Roadside Vegetation Management Alternatives
Project Management Meeting
February 17, 2005

February Action Items

Item #	Action	Due Date
1.	Ray will post the statewide herbicide numbers on website	asap
2.	Kristina will do the edits on the final version of the Literature review and will report back	March 17
3.	Schedule Fish & Wildlife and King Co. Health for presentation	asap
4.	Kristina will post the "scrubbed" interview list on the web	before March 17
5.	Send suggestions on flow chart to Rich	asap
6.	Next meeting – in Boardroom	March 17

Present: Ray Willard
Mark Wahl
Dave McCormick

Jack Taylor
John Andrews
Kristina Hill

Angela Storey
Pat Moylan
Rich Horner

Absent: Bob Berger
Heather Hansen
Lee Dorigan

Jay Davis
Karl Arne
Roy Scalf

Keith Anderson
Josey Paul

News Items: The statewide herbicide numbers are out and will be posted on the website. Overall use of Diuron and 2,4D is down about 30% from the previous year. It was mentioned that a budget issues may have contributed to the dip in numbers in some cases. These numbers are broken down by the Areas where decisions were made at the local level. Numbers shown were also broken down by Zone 1 and other applications. Question was raised about what will take the place of Diuron and 2,4D? Ray said there are 2 products being looked at for the west side: "Portfolio" and "Payload". These are pre-emergent/non-selective and we will be doing test areas. These have 60-90 days residual.

-Ray said they have been in discussion with the state toxicologist and that there are plans on releasing a literature review on all the products we use as part of the agreement that was made last year. They're looking at doing it twice a year. They also want to look at products that may have been left out the list.

-The Roadside Vegetation Management training will be held at the end of March in Silverdale. IVM practices and principles will be covered, along with policy overviews, panel discussions and breakout sessions.

-Dave talked about the work being done on notifying people who have wells adjacent to the highway on Whidbey Island. This is also part of the agreement made last April. Island County has been very helpful in providing us with

information. It's turning out to be a bigger effort than expected. Letters are going to be sent letting people know what are plans are and what their options are. These letters will be going out in a couple of months. The residents will be able to obtain a no-spray permit from Area 2 Maintenance (after they meet the criteria) and basically will have to maintain the area themselves. Dave suggested we continue this discussion next month after King Co. Health and Fish & Wildlife give their presentations. Dave mentioned how Island Co. Health has never found any pollution in any wells that they have gotten samples from. Mark said the herbicide screen that they use doesn't test for all the products.

- Ray is developing other IVM plans for the Northwest Region and the others on the west side of the state. NW will be expanding our Zone 1 pilot to our 5 Maintenance Areas, integrating it with our plans for the upcoming season. Rich asked if the Areas will be using the same techniques. Dave said no, that they will be using a variety of techniques. Rich asked if they could get an experimental design in along with what we're going to try to get reproducible data so that they could try and replicate it. Dave said there's that constant battle between implementing and design. Kristina suggested getting what they're doing now in order to get the "before" data.

- Dave said we need to get a meeting scheduled with WINS/WEAN soon.

- There has been a re-organization down at Headquarters. For the Roadside Program, Ray is now in charge of the west side of the state. The new statewide roadside/snow & ice/pavement program manager is Tom Root. He replaces Rico Baroga.

- A proposed Invasive Species Council bill is in the Legislature. This would have a group of public and private reps including people from federal and tribal groups. The Knotweed bill is being heard on Friday. They're asking for \$4m to fight Japanese Knotweed. This is one of the most serious threats to our waters.

No comments on last month's minutes. Mark asked about the VE Study and if it's finally done. Ray said that it is done, but unfortunately, it cannot be posted on the web. He will try and get some hard copies for interested people.

Literature Review: Kristina handed out the final version of the Literature Review for Decision Factors and Alternative Practices in Zone 1. She said everything they have is listed, but cannot say that this is really the final version because there are some things they haven't been able to find. Basically, this focuses on the use of herbicides, drainage issues and alternative practices. Also included are abstracts. Some of the conclusions that she has drawn are:

- There's not much evidence of specific toxicity resulting from the use of Glyphosate.

- The science on Glyphosate has not shown serious toxic effects to other species.

- Science on the inerts on transformation product from Glyphosate.

- Arguments on the cumulative inert ingredients

- One of the arguments, that is more of a watchful argument than science-based, is the interaction effect on extra sensitive species and extra sensitive humans.

One species that has shown some effects are the amphibians. There has been no past testing done on the interaction within the ecosystem.

- Glyphosate itself doesn't move very far from where it's been applied, but there's evidence that the transformation product does move. There hasn't been any formal testing done on that.

Drainage Issues: basically, there has been no research done. It seems like states that do a lot of snow removal have no ponding problems as compared to states who don't have much snow removal. It could be because the blading removes a lot of debris buildup. They came across more recommendations than studies.

Alternative Practices: Kristina talked about the roadside toolbox that CALTRANS uses. She then talked about the interviews with other states that are aggressively active with alternative practices. Many people are considering the role of compost instead of bio-engineering.

- good resource – "Cost Effectiveness 2002" by Hagan

- vinegar and wet infrared technology show that it killed the leaves but not the roots.

- Maine is using non-native crown vetch to establish a stable roadside variety.

- There's a lot of state literature, but not much on what's working or not working.

Most are prescriptive, but it doesn't tell us if it works.

- There was nothing found on compost tea.

- How to make a decision framework – there was one done in 1994 in Texas similar to what we're doing. Good one to look at.

- Angela asked if Kristina could put at the beginning of the herbicide paragraph that this is not the final work. Kristina agreed.

- Just because it has a low toxicity doesn't mean it's safe.

John asked if there were any international studies done that had similar conditions. Kristina said they didn't go beyond the U.S. due to staying within the legal standards. But, there are international journals that are included in the databases.

- Kristina said she will do the edits and report back.

- we will leave it open right now.

Interview summary: Kristina said they still need to get the "scrubbed" version.

Will post (when available) on website before the next meeting.

Dave handed out the WSDOT Herbicide use for 2002-2004 spread sheet and the draft agenda for the Spring Training. For the spread sheet, it was mentioned that the negative sign means increase. Ray said he has put together a summary of the reasons why for the increases. Mark commented how it would be interesting to see the numbers for the 90's. Ray said they don't have accurate data from before 1994. The spread sheet also showed there was a big difference between the East and West sides of the state.

Going back to the agenda for the Roadside vegetation management training, Angela asked why there are industry reps who may have a financial stake in this

on the panels. Ray said he tried to have a balance spread between the industries and other groups. Ray explained who the industry reps are and why they are on the panels. Dave said that there will be other balanced views throughout the training. Plus, our guys need to learn about the equipment they will be using along with how to use the chemicals. Ray also mentioned that instead of ODOT, it will be someone from B.C. coming.

Decision Framework: Rich gave a brief overview of the structure and talked about some of the changes that were made.

-Definitions – there were a few changes made.

-Core – the 3 modules

1. Decision Factors
2. Environmental sensitivity (relative to the ecosystem) no changes within, but some change in how they were approached in the process.
3. Alternative Assessment – added several alternatives. It's about 35 now. We do have some very good materials from the literature review on alternatives.

-Mostly complete. We still have unknown variables – value of “x”. Tried to get the value of “x” out of the interviews, but there was very few. If it's important to know “x” then we should do further research, if not, it should get moved down the list.

Dave added that the number of accidents are down for the first time in a decade. Fatalities are under 600 for the first time ever. A couple of the areas that haven't improved is vehicles going off the road and wildlife kills. Maybe this could be something we could connect to our study? If we allow vegetation to grow along the roadways or encourage grazing, then the number of wildlife kills could increase. There is just more traffic volume with suburban expansion along with the increase in the deer population. A discussion on wildlife and what the effect of Zone 1 would be on them ensued. Dave said the bigger issue is the obstruction of signs and the reduction of sight distance. Rich asked how we could use this kind of info. A suggestion of having a GIS layer that showed accident spots was made.

Rich went over the changes that were made in the draft document:

-Pavement edge zone – Zone 1, which means “bare of vegetation” and next to the pavement. Discussion began about what Zone 1 is.

-show a difference between conventional analysis and non-conventional. John suggested using “pre-emergent/non-selective” instead of the word “conventional” to make clear what exactly conventional means. A discussion on what to use in order to define “conventional” and “non-conventional” began. The preliminary statement for conventional Zone 1 is “maintenance of a bare ground section with non-selective herbicides applied annually in a solid band to the pavement edge. The herbicides are always a pre-emergent type, but occasionally in certain circumstances include contact herbicides.

-Organic herbicide – naturally occurring or produced. It could also mean it's a natural substance even though it's been made in a factory. Just because it's organic doesn't mean it's kind.

-Major changes – switched the environmental module with the alternative module. Angela disagreed with this move. Lively discussion began regarding the placement of the environmental module and the reasons why this new placement doesn't work. Dave commented the chart reflects our current law.

It was decided to add to the box, "most limited herbicide use & *the least toxic*". Dave said the IVM plan isn't on this flow chart and makes the assumption that there isn't any plan. Maybe the IVM should be put into the box "Long term assessment..." which will be reviewed annually. Makei suggested having 2 environmental sensitivity modules. John suggested a paragraph preceding the flow chart explaining what it means or maybe adding a caption. Rich said he's still working on how to word it.

-Angela said the assessment module needs to go first

Discussion on changing the flow chart back to the way it was began.

Dave said we need to keep this relatively simple. John said we need to be careful about making a broad assumption that all agriculture lands are high chemical users. Discussion started on agricultural usage.

Send suggestions on the flow chart to Rich by next week.

Dave and Ray mentioned that the Technical group will be meeting on March 2nd and would like to see how this flow chart fits in with the IVM. They may want to look at a couple of versions of the flow chart.

John has put together a short list on assessments so that it makes more sense. He grouped them together so that it can all be there on the chart.

It was agreed that this discussion on the flow chart is not over and that we will pick this up at next month's meeting.

Next month's meeting is on March 17, 2005 at 11:30 am in the Boardroom.